

US.Pat.Apl.Ser.Nr: 10/694,835

Docket 221-46US

Remarks

responsive to O/A dated 04 October 2004.

1. Claim 4 was rejected under 35 USC 112: *In claim 4 it is indefinite as what range of thickness is defined by "thick".*

We ask that this rejection be reconsidered.

Claim 4 reads as follows: *Procedure of claim 1, wherein the said green plants include plants having foliage that is characterised as thick and fleshy, and as having a waxy surface.*

Claim 4 must be so worded that the notional skilled person is able to determine the scope of the protection we are seeking, with a reasonable degree of certainty. That is to say, claim 4 must be so worded that the skilled person can determine whether this or that actual plant is or is not covered by claim 4.

It is true that our expression *foliage . is . thick and fleshy* expresses a limitation in comparative, rather than absolute, terms. In such a case, it is perfectly proper for the skilled person to review the disclosure of the specification, for assistance as to the scope the comparative term is intended to have, in the context of the invention.

The skilled designers of plant-based remediation systems cannot fail to understand that, if the atmosphere is too poisonous, even thick fleshy foliage will not save the plants; equally, if the air in the room is clean, even the thinnest foliage will survive. So, the expert knows that the question whether this or that plant is covered by claim 4 depends on the ammonia content of the air in the room.

In paragraph [0042], for example, we inform the skilled reader that -- in a particular room, and at a particular ammonia level -- the foliage is too thin to be able to perform our invention if it is so thin that it shrivels and turns black in a few days. We give the example that, at the ammonia levels likely to be encountered in real life applications of our invention, the spider plant's foliage was too thin, whereas the foliage of the hoyo and peperomia plants was unaffected. Furthermore, we offer a reasoned explanation as to why thickness /fleshiness is important, in paragraph [0043].

The skilled person cannot fail to understand our suggestion that if, in a particular room and contamination level, the leaves are so thin that they shrivel and turn black (or otherwise deteriorate comparably), we suggest turning to a plant with thicker foliage. Our clear teaching is to choose a plant having such thick/fleshy foliage that the plant survives over a long service life.

The scope of claim 4 should be reviewed in the light of the above aspects of our Disclosure. Thus, a plant is not included within the scope of claim 4 if its leaves are so thin that they shrivel and turn black (or deteriorate in a comparable manner) within a few days of exposure to the kinds of levels of airborne ammonia that are present in the room. If the foliage of plant X is so thick and fleshy that plant X survives indefinitely in that room and at that contamination level, then plant X is included within the scope of claim 4. If the foliage of plant X is so thin that the plant is so deleteriously affected by the ammonia that the foliage turns black, or otherwise deteriorates in a manner comparably likely to affect performance, plant X is not covered by claim 4.

Thus, in the context of the invention as disclosed, and as it will be understood by persons skilled in botany and hydroponic horticulture, in our view the words of claim 4 do in fact define the metes and bounds of the scope of protection we are seeking, sufficiently to enable the skilled person to determine the scope with a reasonable degree of certainty. Therefore, we ask that claim 4, as originally filed, be allowed along with the other claims in this case.

2. *Further, it is unclear as to what constitutes a "fleshy" surface.*

We point out that, in fact, claim 4 does not refer to the foliage as having a "fleshy" surface. We might agree that, if it did, that would be objectionable under 35 USC 112. What claim 4 requires is that the surface be "waxy" — a term that is well understood by persons skilled in the art of selecting between plants on the basis of their physical characteristics. We do not see that any '112 rejection can be sustained in respect of the surface of the foliage.

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